A4

with pressure by application of a pressure for a predetermined time in a vertical direction. Therefore, it is possible to increase contact areas of all the solder bumps 3, and it possible to previously break parts of oxide films on the solder bumps 3.--

Please replace the paragraph beginning at page 6, line 11, with the following rewritten paragraph:

A5

--Subsequently, as illustrated in Figure 1e, by cooling the ultrasonic bonding head 4 to be a temperature of the fusing point of solder or less, a temperature of the semiconductor element 1 is decreased, and the solder bumps 3 are solidified by the temperature decrement. Thereafter, the suction of the semiconductor element 1 is released and the ultrasonic bonding head 4 is raised, wherein the flip chip bonding is completed.--

IN THE CLAIMS:

Please amend claim 1 as follows:

A6

SUB C1

1. (Amended) A flip chip bonding method for mounting a semiconductor element on a wiring board comprising steps of:

applying a vacuum to the semiconductor element through an ultrasonic bonding head to fixedly attach the semiconductor element to the ultrasonic bonding head; and

applying a pressure and heat to solder bumps, formed on both or one of a connecting pad of the semiconductor element or a connecting pad of the wiring board for connecting the solder bumps under a state that the solder bumps are in contact, heated to a temperature more than the fusing point of the solder, and fused while the ultrasonic bonding head is moved in a plurality of directions or along a circular locus.